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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,459	03/15/2002	Mika Viljanmaa	3397-113PUS	3046

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New York, NY 10176

EXAMINER

SELF, SHELLEY M

ART UNIT	PAPER NUMBER
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3725

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DATE MAILED: 04/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,459

Applicant(s)

VILJANMAA, MIKA

Examiner

Shelley Self

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-43 and 46-53 is/are rejected.
- 7) ☒ Claim(s) 44, 45 and 54 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The amendment filed on February 6, 2004 has been considered but is ineffective to overcome the prior art reference and an action on the merits follows.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "the plural actuator means...at least one spring and at least one hydraulic cylinder (clm. 13)" must be shown or the feature(s) canceled from the claim(s). The drawings depict, either a hydraulic cylinder or spring, but fail to depict a calender system utilizing both a hydraulic cylinder and spring. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 10, 12, 14, 16, 26, 32-36, 50 and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Lamon et al. (4,266,475). Claims 10, 12, 14, 16, 24, 26 and 32 are rejected as noted in the previous Office Action.

With regard to claim 34, Lamon discloses the bottom roll connected to the frame (fig. 2).

With regard to claim 35, Lamon discloses a mount (40) to which the bearing block of the bottom roll (35) is connected.

With regard to claim 36, Lamon disclose the bottom roll solidly connect to the frame (fig. 2).

With regard to claim 50, Lamon discloses opening a calender by removing loading imposed by a loading cylinder.

With regard to claim 51, Lamon disclose opening all nips.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 11, 13, 15, 17, 19, 21, 23, 27, 29, 31, 37-43, 46-48, 52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamon et al. (4,266,475) alone or view of Karr et al. (4,501,197). Claims 11, 15, 17, 19, 21, 27 and 29 are rejected as noted in the previous Office Action.

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With regard to claims 13, 40-43 and 47-49, Lamon discloses a hydraulic cylinder (50). Lamon does not disclose the use of both a hydraulic cylinder and at least one spring. Karr teaches the use of a hydraulic cylinder (47, 48) in conjunction with a biasing spring (59) selected so to efficiently relieve calender load(s). Because the references are from a similar art and deal with a similar problem (i.e. load relief devices) it would have been obvious at the time of the invention to provide Lamon with a spring as taught by Karr so as to relieve the calender load.

As to the selection of a cup or progressive springs (clm. 41, 46, 48, 49), it is well within the ordinary level of the skilled artisan to select a known material/type of spring based on its applicability for the intended function. The specific selection of a cup and/ or progressive spring requires only routine skill in the art and creates no unobvious, unusual or unexpected result. See *In re Leshin*, 125 USPQ 416.

As to the dimensions of the spring, discovering the optimum value (i.e. spring dimension) involves only routine skill in the art.

With regard to claim 37, Lamon disclose a top-loading cylinder (23).

With regard to claims 38, 39 and 52, Lamon does not disclose the calender having a bottom-loading cylinder. Lamon does however disclose vertical movement of the bottom roll so as to relieve loading pressure. Karr teaches the use of a bottom cylinder (19) for load relieving in a vertical calender apparatus. Because the references are from a similar art, it would have been obvious at the time of the invention to one having ordinary skill in the art to provide Lamon with a bottom cylinder so as to relieve vertical load(s) as taught by Karr.

With regard to claim 53, Lamon disclose opening all nips.

Claims 18, 20, 22, 24, 25, 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamon et al. (4,266,475) as noted in the previous Office Action.

Allowable Subject Matter

Claim 44, 45 and 54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments have been carefully considered but they are not persuasive. Applicant argues that the prior art reference Lamon fails to disclose an *“actuator means located between the mounts and/or bearing blocks of adjacent rolls relieves the linear loading...between the adjacent rolls caused by the weight of the rolls, bearing blocks, mounts and any other actuator means located above the actuator means in the vertical stack”*. This argument, however is not found persuasive, Lamon clearly discloses actuator means positioned between adjacent calender rolls in a vertical roll stack and could therefore serve to relieve load/stress of element(s) above which the actuator means is positioned.

Additionally, Applicant argues limitations not positively recited in the claims. For example, Applicant argues that the prior art, Lamon fails to disclose actuator means, *“individually adapted”* to the specific weight caused by the rolls above it. And that instead, Lamon teaches a single pressurized reservoir 88 through oil line 86 to the oil chambers of the

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actuator means/hydraulic pistons. However the claims do not positively recite any structure as “individually adapted” actuator means. Accordingly the rejection is deemed proper and stands.

Conclusion

The prior art made of record and relevant to Applicant’s disclosure. Berry (4,510,859) and Stotz (4,5823,690).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

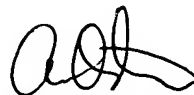
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelley Self whose telephone number is (703) 305-5299. The examiner can normally be reached Mon-Fri from 8:30am to 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner’s Supervisor, Allen Ostrager can be reached at (703) 308-3136. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular and After Final communications.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelley Self whose telephone number is (703) 305-5299. The examiner can normally be reached Mon-Fri from 8:30am to 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Allen Ostrager can be reached at (703) 308-3136. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

SSelf
April 19, 2004



ALLEN OSTRAGER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700